PATENT Docket: 71306

Amendment to the Claims

(Currently Amended) Photopolymerizable colorant compounds having Formula 1.

$$A \left(S \stackrel{N}{\longrightarrow} N \stackrel{Y}{\longrightarrow} R \right)_{n}$$

wherein

11:

A, is a mono-, di-, tri- or tetravalent anthraquinone, anthrapyridone, or anthrapyridine chromophore;

Y is -R₁-O-Q, the photopolymerizable group -CH₂-C₆H₄-p-C(R₂)=CH₂ or Q;

R is hydrogen, C₁-C₆ alkyl, aryl or C₃-C₈ cycloalkyl;

 R_1 is C_2 - C_8 alkylene, -(- CH_2CH_2O -)_m- CH_2CH_2 - or 1,4-cyclohexylenedimethylene;

R₂ is hydrogen or C₁- C₆ alkyl;

n is 1 to 4;

m is 1 - 3;

Q is a photopolymerizable group selected from an organic radical having the formula:

la -COC(R₃)=CH-R₄

-CONHCOC(R₃)=CH-R₄ lla

Illa -CONH-C₁ - C₆-alkylene OCOC(R₃) =CH-R₄

IVa -COC-NHCOC(R₃)=CH-R₄

Va -COCH=CH-CO₂R₇

VIa
$$-CO - C(R_3) = CH_2$$

VIIa
$$\xrightarrow{R_5}$$
 $C(R_3)=CH_2$ R_8

wherein

 R_3 is hydrogen or $C_1 - C_6$ alkyl;

 R_4 is selected from hydrogen; C_1 - C_6 alkyl; phenyl; phenyl substituted with one or more groups selected from C_1 - C_6 alkyl, C_1 - C_6 alkoxy, -N(C_1 - C_6 alkyl)₂, nitro, cyano, C_2 - C_6 alkoxycarbonyl, - C_2 - C_6 alkanoyloxy or halogen; 1- or 2-naphthyl; 1- or 2-naphthyl substituted with C_1 - C_6 alkyl or C_1 - C_6 alkoxy; 2- or 3-thienyl; 2- or 3-thienyl substituted with C_1 - C_6 alkyl or halogen; 2- or 3-furyl; or 2- or 3-furyl substituted with C_1 - C_6 alkyl;

 R_5 and R_6 are independently selected from hydrogen, C_1 - C_6 alkyl, substituted C_1 - C_6 alkyl; aryl; or R_5 and R_6 may be combined to represent a -(-CH₂-)₃₋₅- radical;

 R_7 is hydrogen or C_1 - C_6 alkyl, substituted C_1 - C_6 alkyl, C_3 - C_8 alkenyl, C_3 - C_8 cycloalkyl or aryl; and

R₈ is hydrogen, C₁ - C₆ alkyl or aryl.

2. (Currently Cancelled)

3. (Currently Amended) Photopolymerizable colorant compounds according to Claim-2 claim 1 wherein Y is -CH₂CH₂OQ, -CH₂CH(CH₃)OQ, -(CH₂CH₂O)₁₋₂-CH₂CH₂OQ, -CH₂C(CH₃)₂CH₂OQ, or -CH₂-C₆H₁₀-CH₂OQ and A is an anthraquinone, anthrapyridone or anthrapyridine residue or a-2,5 diarylaminoterephthalate chromophore residue.

- 4. (Currently Amended) Photopolymerizable colorant compounds according to Glaim 2 claim 1 wherein Q is -COCH=CH₂ or -COC(CH₃)=CH₂.
- 5. (Previously Canceled)
- 6. (Previously Canceled)
- 7. (Previously Amended) Process for the preparation of the photopolymerizable colorants defined in Claim 1 wherein Y is a p-vinylbenzyl radical having the formula CH₂-C₆H₄-p-C(R₂)=CH₂ which comprises reacting colored acidic compounds having the structure

$$A \left(S \left(S \left(N \right) \right) \right) = \left(S \left(S \left(N \right) \right) \right)$$

with 4-chloromethylstyrene compounds having the structure CICH₂₋C₆H₄₋p-C(R₂)=CH₂ in the presence of a base.

- (Currently Amended) Process for the preparation of the colored photopolymerizable compounds defined in Claim 1 wherein Y is -CH₂CH₂-O-Q, -CH₂CH(CH₃)-O-Q or Q, which comprises the steps of:
- (a) reacting a colored acidic compound having the structures:

$$A \leftarrow S \stackrel{N - N - H}{\longrightarrow}_{R}$$

with at least about n molecular equivalents of ethylene or propylene carbonate for each molecular equivalent of acidic compound to produce the 2-hydroxyalkyl derivatives of said acidic compound;

(b) reacting said colored 2-hydroxyalkyl derivatives with about n molecular equivalents of one or more acylating agents having the structures:

Ib $CICOC(R_3) = CH-R_4$ or $O[COC(R_3) = CH-R_4]_2$,

IIb $O=C=N-COC(R_3)=CH-R_4$,

IIIb $O=C=N-C_1-C_6$ alkylene $OCOC(R_3)=CH-R_4$,

IVb
$$R_s \stackrel{N \longrightarrow C(R_s) = CH-R_s}{\nearrow}$$

VIb cico
$$\langle -\rangle$$
 $C(R_3)=CH_2$,

VIIb
$$O = C = N - C(R_3) = CH_2$$

- 9. (Previously Canceled)
- 10. (Currently Amended) Process according to Claim 8 wherein Y is a photopolymerizable group Q, which comprises the steps of:
- (a) reacting a colored acidic triazolylthio compound having the structure:

$$A \leftarrow S \xrightarrow{N} R \xrightarrow{R}$$

with at least about n molecular equivalents of ethylene or propylene carbonate to produce a hydroxyalkyl compound having the formula

$$A \left(S \stackrel{N \longrightarrow N}{\longrightarrow} R \right)_{n}$$

wherein R' is hydrogen or methyl, and

(b) reacting the hydroxyalkyl compund produced in step (a) with about n molecular equivalents of one or more of acylating agents lb through IXb.

Claims 11.-20. (Previously Canceled)